

tinguishing a spinal portion which arises from a long group of cells in the lateral projection of the anterior cornua, and a medullary portion whose cells are not separable from the cells of the vagus nucleus. Darkschewitsch claims that the nerve arises from a continuous column of cells lying laterad and dorsad from the median group of the anterior cornua and preserving the same relation to the hypoglossal nucleus in the medulla. This column extends from the fifth cervical segment upward to the lower vagus nucleus at the lower third of the olivary body. The accessorius nucleus has therefore no connection with the upper or lower vagus nucleus, nor with the solitary fasciculus, as was claimed by Stieda. The roots of the nerve pass from the nucleus laterad, making a sharp curve in their course to the surface. The concave side of the curve is directed ventrad and laterad.—*Neurolog. Centralbl.*, March 15th.

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THE POSTERIOR COMMISSURE OF THE BRAIN.—Spitzka has destroyed the entire left thalamo-crural region in a cat and observed the subsequent atrophy. He describes the following changes: The posterior commissure was reduced to half its normal size. The fibres from the left thalamus to the commissure were absent. The fibres from the commissure to the right half of the tegmentum were absent. There was present on the left side a distinct field under the posterior longitudinal fasciculus, close to the raphé, which was continuous with the posterior commissural fibres. This field was atrophied on the right side. There was an atrophy of the reticular field on the left side, lying between the posterior longitudinal fasciculus and the descending trigeminus root. There was atrophy of the right nucleus of Burdach.

He concludes that the thalamus is connected with the fundamental strand of the anterior column of the oblongata by means of the internal fibres of the reticular field—which cross in the posterior commissure,—and that the thalamus or subthalamie region is connected with the nucleus of Burdach by means of fibres which pass in the middle part of the reticular field, and decussate in the medulla. The first tract Spitzka names the thalamo-tegmental tract. It decussates in the posterior commissure. This experiment confirms the conclusion of Meynert, that each thalamus is connected with both reticular fields of the tegmentum by two great strands, one direct and one crossed.—*Alienist and Neurologist*, April, 1885; *Boston Med. and Surg. Jour.*, April, 1885.

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#### b.—PHYSIOLOGY OF THE NERVOUS SYSTEM.

A HEAT-CENTRE IN THE CEREBRUM.—Herr Aronsohn and J. Sachs have made a series of experiments upon this subject on rabbits and dogs. The experiments were made upon the brain of rabbits with a needle, and the rectal temperature noted. After

the lesion the temperature increased to 42 C. ; the respiration was increased, also the frequency of the pulse, with diminution of the chloride in the urine. The state of the rabbit during the experiment, and many weeks after it, was excellent ; there was no disturbance of the motor, sensory, or digestive apparatuses. The point where the needle entered was somewhat to the side of the place of junction of the sagittal and coronal sutures, and then it was pushed to the base of the brain and withdrawn. The increase of temperature lasts two to three days, and then returns to normal.—*Deutsche medicinische Wochenschrift*. No. 51, 1884.

[NOTE.—The location of this centre has been pointed out by the translator in a previous number of this JOURNAL : “The influence of the diabetic puncture upon the temperature of the body, and especially the liver-temperature.”]

Herr Aronsohn has made a series of experiments upon this point. Observations at the bedside have shown diabetics to have a subnormal temperature. His experiments were made upon rabbits ; his results were as follows : When the sugar-puncture is correctly made without injury to the neighboring parts, the temperature of the liver sinks, as it also does in the muscles and rectum. By injury to the adjacent parts the temperature in the beginning falls, but returns to the original temperature. If the sugar-puncture fails, or by simple injury of the medulla, or pons or the lateral parts of the medulla, the temperature increases without a preliminary fall about 1.5° above normal.—*Deutsche medicinische Wochenschrift*, No. 46, 1884.

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THE VASO-DILATORS AND VASO-CONSTRICTORS.—Drs. von Anrep and Cybulski have made a series of experiments upon this point. They used the plethysmograph, and found that atropia did not cause any paralysis or weakening of the irritability of the nervi erigentes. They arrived at the following conclusions : There is no analogy between the vaso-constrictors and vagi in their relation to atropia. There is no analogy between the vaso-constrictors and the accelerators of the heart, since the strongest irritation of them is not able to overcome the effect of a very weak irritation of the vagus, whilst irritation of the vaso-constrictors with weak or strong currents removes the effect of the irritation of the vaso-dilators. A definite height of blood-pressure is an indispensable condition for the appearance of a marked dilatation of the vessels. There is no important difference between these two kinds of vaso-motor nerves. The facts contradict the view of two complete independent neuro-muscular apparatuses in the vascular walls.—*Centralblatt für Nervenheilkunde*, von Dr. Erlenmeyer, No. 24, 1884.

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THE LIVER-FERMENT.—Miss Florence Eves has made a series of experiments upon this subject, and arrived at the following con-